REMARKS

Entry of the foregoing and further and favorable reconsideration of the instant application, pursuant to and consistent with 37 C.F.R. § 1.111, are respectfully requested.

Status

By the present amendment, the only pending claim of the application, namely Claim 1, has been canceled and new Claims 63-85 have been presented. The Specification has been objected to. *Id at Item 9.* The drawings filed on December 9, 2003, have been accepted by the Examiner. *Id. at Item 10.*

Summary of Amendments

By the foregoing amendment, Applicant has amended Page 1 of the Specification to reflect that the parent application for the instant application issued as United States Patent No. 6,706,523, on March 16, 2004, and that the provisional patent application from which that patent originated is now expired. In addition, Applicant has amended Page 1 of the Specification to reflect the fact that Applicant claims priority to these earlier applications. These amendments are clerical in nature and no new matter has been added as a result thereof.

Further by the foregoing amendments, Applicant has canceled Claim 1, which was previously examined in parent U.S. Application Serial No. 10/199,024 and issued in U.S. Patent No. 6,706,523 ("the '523 patent"), and has added new Claims 63-85. No new matter is believed to have been added.

Objection to the Specification

The Examiner objected to the specification for failing to reflect the current status of the cross-referenced applications listed on Page 1 of the application. *Office Action mailed July 16, 2006, Page 2.* By the foregoing amendments, Applicant has amended Page 1 of the specification to, *inter alia*, reflect the current status of the cross-referenced applications. Accordingly, Applicant believes these amendments have rendered moot the objection to the specification.

Rejection Under 35 U.S.C. § 112, First Paragraph – Written Description

Claim 1 was rejected under 35 U.S.C. § 112, First Paragraph, as purportedly lacking sufficient written description. *Office Action mailed July 16, 2006, Pages 2-4.* This rejection is moot in light of the newly-presented claims.

Rejection Under 35 U.S.C. § 102(b) Over Clark

Claim 1 was rejected under 35 U.S.C. § 102(b) as purportedly anticipated by Clark and Ohtani (1976) *Infection and Immunity* 13:1418-1425 (hereinafter "Clark"). *Office Action mailed July 16, 2006, Pages 5-6.* This rejection is moot in light of the newly-presented claims.

35 U.S.C. § 101 – Statutory Double Patenting Rejection

Claim 1 was rejected under 35 U.S.C. § 101 as purportedly claiming the same invention as that of Claim 1 in the '523 patent. *Office Action mailed July 16, 2006, Pages 5-6.* This rejection is moot in light of the presentation of new claims with the present amendment, which were not included in the issued '523 patent.

Comments Regarding Canceled Claim 1

While moot in light of the cancellation of Claim 1, Applicant would like to address the Examiner's rejections of Claim 1, which had already issued in U.S. Patent No. 6,706,523.

Claim 1 was rejected under 35 U.S.C. § 112, First Paragraph, as purportedly lacking sufficient written description. The Examiner asserts that:

> The specification does not identify the minimum regions or specific positions where the respective N proteins are to be dephosphorylated, except for N position 389 (as well as mutations at glycoprotein G).

Office Action mailed July 16, 2006, Pages 3-4. The Examiner also alleges that Applicant has only disclosed a single example of an unphosphorylated mutant rabies virus.

As Applicant discloses in the specification, the single phosphorylation site on the rabies virus protein is Serine 389. *See specification at Page 2, Lines 11-22.* The Examiner's assertion that Applicant has only disclosed a single example of an unphosphorylated mutant rabies virus is erroneous – Applicant has indeed constructed mutant rabies viruses wherein the serine at the single site which might be phosphorylated is modified to an alanine (A), to a glycine (G), to an aspartic acid (D), to an asparagines (N), to a glutamic acid (E), or to a glutamine (Q). *See Example 3, at Pages 36-53 of the specification.* None of the A, G, D, N, E, or Q residues is, or even could be, phosphorylated, because they do not contain a free -OH group as does serine, which is where the phosphorylation occurs. In addition, Applicant disclosed additional mutants in Example 4 of the specification, where, in addition to mutation of the single phosphorylation site, mutations at Leucine 16 (to either alanine, aspartic acid or glutamic acid) were made. *See specification at Pages 53-56.*

As such, Applicant provided in his specification not one example, but at least nine examples, of mutant rabies viruses within the scope of Claim 1. However, the Examiner's rejection is moot in light of the newly-present claims.

The Examiner also rejected Claim 1 under 35 U.S.C. § 102(b) over Clark and Ohtani (1976) *Infection and Immunity* 13:1418-1425 (hereinafter "Clark"). The Examiner alleged that Clark disclosed at p. 1918 [sic, 1418] that Clark disclosed a mutant rabies virus. While Clark describes temperature-sensitive rabies virus mutants, Clark does not describe a mutant rabies virus wherein the N protein is not phosphorylated, as required by cancelled Claim 1. The Examiner further alleges that Applicant's disclosure teaches at Page 52 a period during which the N protein of the mutant rabies virus is not phosphorylated. *Office Action mailed July 16, 2006, Page 5.*

Indeed, Applicant's mutant rabies virus is not ever phosphorylated. Page 52 of Applicant's disclosure discusses a possible mechanism by which the N protein of wild type rabies virus is naturally phosphorylated, based upon the observation that **free** N protein (***i.e.*, not N protein which is associated with a virus as required by cancelled Claim 1**) is not phosphorylated. Indeed, there is obviously a point in the production of N protein where it is not yet phosphorylated. However, Applicant's disclosure at Pages 52-53 goes on to describe this potential mechanism for phosphorylation by stating that the N protein is not phosphorylated before encapsidation, but becomes phosphorylated during the encapsidation process. As such, this period of unphosphorylated N protein in the wild type rabies virus is **prior to the production of an intact virus**. Therefore, Applicant's disclosure does not suggest that there is a point in the production of wild type virus or any mutant virus during which a **virus** contains an unphosphorylated N protein. Clark is therefore not prior art to Claim 1, because it does not even inherently disclose an mutant rabies virus with an

unphosphorylated N protein. However, this rejection is moot in light of the newly added claims.

CONCLUSION

The present application was filed as a divisional application of the application which issued as the '523 patent, and Applicant intended to provide additional claims for examination which were accordingly directed to another invention disclosed in the application. Applicant's representative regrets that such an amendment was not made prior to examination.

However, with respect to cancelled Claim 1 of the present application and its identity to previously issued Claim 1 of the '523 application, if the Patent Office supports the position of the Examiner with respect to the Clark publication, then a Commissioner-ordered re-examination would be appropriate. However, in light of the discussion above demonstrating that the Examiner's rejection was based on an erroneous reading of Applicant's specification, Applicant does not intend to pursue its own re-examination of the '523 application.

In the event that there are any questions relating to this Amendment or to the application in general, it would be appreciated if the Examiner would contact the undersigned attorney by telephone at (202) 373-6150 so that prosecution of the application may be expedited.

The Director is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-2518.

Respectfully submitted,
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